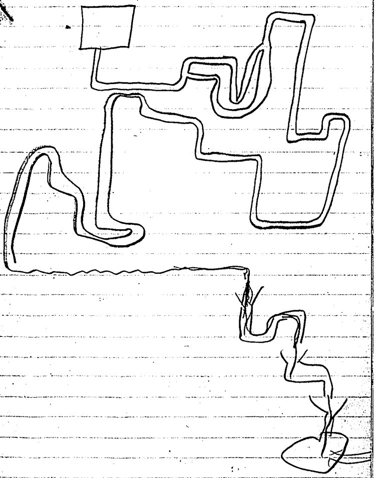
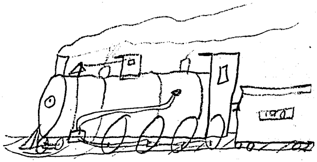
Notebook, N-08-00-00.3

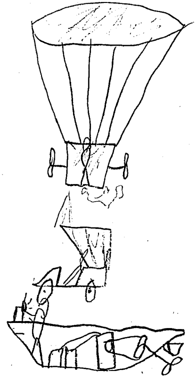
This undated notebook was probably used by Edison in 1907 or 1908, but it may have been used as late as 1910. The book contains notes and drawings regarding continuous-process belting, possibly related to the manufacturing process used by the Edison Portland Cement Co. Over half of the book consists of miscellaneous notes and drawings, probably by Edison's youngest son, Theodore. The pages are unnumbered. Approximately 30 pages have been used.

William H. Hasey
... STATIONER ...
Good Work Promptly
68 William Street,
New York.

Apparatus.







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12
11
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8
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1
0

104 401
401 104

5 3 2
2 3 5

[illegible]

9
+7
2 16
2
9
11

9 61
7 2

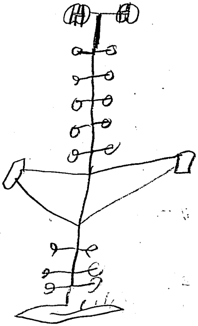
11
2

4110
-14

[illegible]

9 0

72 2 7



nan

456 6 5 14
654 -456
~~1 9 8~~
0 0 2

~~1 9~~

5 2 11
-1 2 5
~~3 9 6~~

11
1 89
17

9 3
1 ~~2~~ 3 8 9 1 15
69

---

1 9
1 12 4 11
-1 4 2 7
~~5 8 4 4~~

17 14 13
8 5 5 -4
10 4 1
1 8

2 13 14 11
+1 4 3 2
~~9 8 4~~

18
90
4
8
1
9

6 0 14
-4 0 6
~~7 9 8~~

8
7 0 14
4 0 7
~~3 8 7~~ = 16
7

8 0 4 17
7 4 0 8
~~1 6 4~~ 9 = 15
6

13 12
4 16

8 7
1
10 7
1 7 00
8 9 7

5-0
5-0

101

204

402
204
198

402
204
198

402
204
1 9 8
4 0 2

10
1 376
673

673
-376
~~297~~ = 16
~~46~~
1 8 1

376
763

8 7 4
4 7 8
3 9 6 = 1 2

1 2
5 7 1

3 9 ~~6~~ $\frac{12}{3}$

5 3 8
8 5 3
6 8 3 = $\frac{14}{5}$

5 3 8
8 5 3
6 8 5 = $\frac{13}{4}$

8 3 5
5 3 8
2 9 7 = $\frac{11}{2}$ ~~24~~

6 2 3
3 9 6
2 9 7 = $\frac{11}{2}$

6 8 7
7 8 6

6 8 7
7 8 6
9 4 1 = $\frac{10}{1}$

6
7 8 6
6 8 7
1 9 9 = $\frac{18}{9}$

402

$$\begin{array}{r} 402 \\ 204 \\ \hline 198 \end{array} = \frac{10}{1}$$

$$\begin{array}{r} 532 \\ 235 \\ \hline 297 \end{array} = \frac{11}{2}$$

3

$$\begin{array}{r} 5673 \\ 3765 \\ \hline 1908 \end{array} = \frac{190}{18}$$

$$\begin{array}{r} 5383 \\ 3833 \\ \hline 1548 \end{array} = \frac{18}{12}$$

$$\begin{array}{r} 5383 \\ 3835 \\ \hline 15\cancel{4}8 \end{array} \quad 18$$

1.

$$\frac{14}{5}$$

1 2 3 4 5 6 7 9

1 2 3 4 5 6 7 9

1 1 1 1 1 1 1 1 1

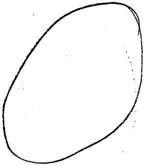
10 11 12 13 14 15 16 17

18 19

1 9 3 4 5 6 7 8 9

10 5

7
500
4
1
22
900
800
100
21



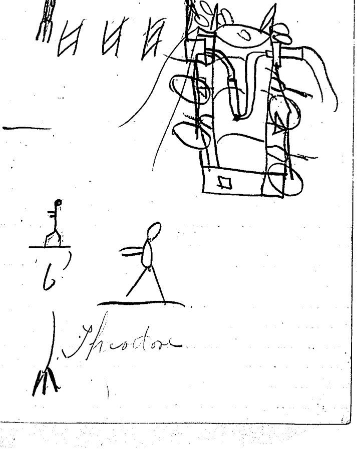
6
50
1000
300
45
75
25

7	6
100	1000
1000	1000
100	1000
1000	
1000	
1000	
100	

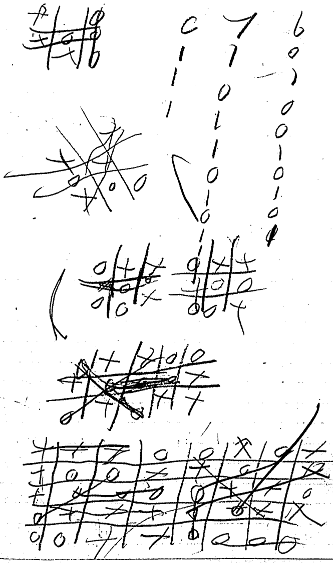
1 2 3 the cat
caught a flee.
The flee died the
Cat cried 1 2 3.

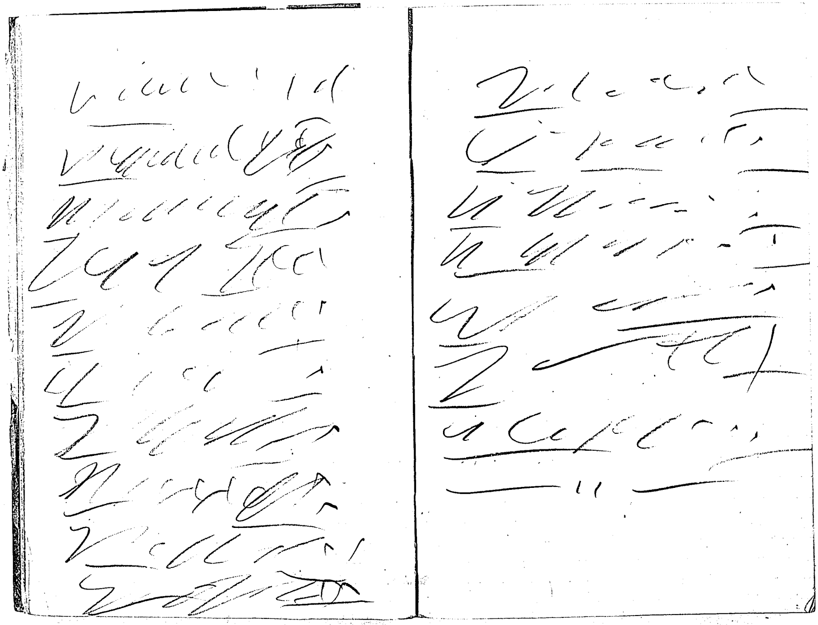
2 3 for yourseff

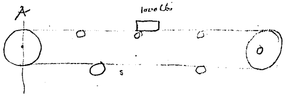
4 5 0
+7 3 4
-9 2 4
+6 2 4
-5 3 4
3 5 0



1 2 3 4 5 6 7 8 9 10





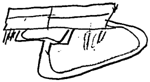


1000 load — friction 1/10 — 100 lbs stress on belt
~~half~~ bite necessary 1 to 3½ ~~285 lbs.~~ -

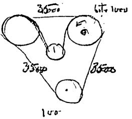
35 | 1000 (28.5 .350
70
300
280

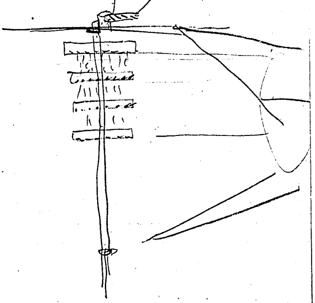
A Driven
Stress on bottom 350 lbs — ditto top —
Total stress on belt for bite 350 lbs —
Extra pull on top 100 — total 450 lbs
on top 350 bottom —

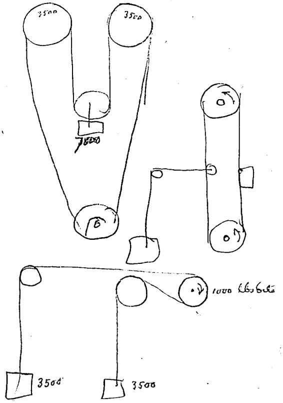
A + B driven — 100 lbs pull — adhesion pull necessary
% for ½ — 175 — adhesion pull for other pulley
175 —

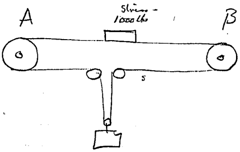


Drive this
3500


3500
bite 1000
3500
3500
100




3500
3500
7000
1000 lbs bite
3500
3500


A
Stress -
1000 lbs
B
s

Bite required A 3500 — B 3500 —

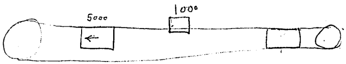
total stress 3500 — for bite —— Weight 7000

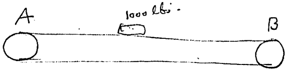
Drive A —— stress top 4500 —
bottom 3500

Drive A + B — stress wt 1000

Stress for bite on A 1750 on B 1750 -

total 3500 on wt -





~~Stress on Belt, 1750 lbs at~~ A.
~~+ Through the belt everywhere~~

If driven at A. It requires a pressure of 1750 lbs stress throughout the whole belt saying there was no friction on Idlers or head or tail wheel. This would produce a pressure on A of 3500 lbs. + give bite enough 3.5 to 1 to drive— This pressure is the same on B but is not utilized — + is a necessary Evil

Now if we drive both then the stress for traction or belt in the whole belt system is reduced from 1750 throughout to 875 lbs This gives 1750 strain on A + 1750 strain on B — a total of 3500 lbs pressure which is necessary to drive —

It is the unavailability of the necessary stress on the tail pulley due to the stress on the head pulley that causes Excess of stress.